Healthcare heroes: Care amidst chaos

Sometimes the moments that define us are the toughest ones to live through. For the Canterbury District Health Board, that moment arrived in 2011 when Christchurch, New Zealand, was rocked by a massive, destructive earthquake. The district saw the rebuilding process as an opportunity to evolve its data center and its patient care philosophy. By transforming tragedy into innovation, Canterbury DHB became a hero for a region and a leader for healthcare on the world stage.
TREND

Accelerating the adoption of digital medicine

Patients win when innovators lead the way

Digital healthcare isn’t just about taking a legacy industry to a paperless future. But the shift to electronic health records was an important first step.

Driven by creating improved customer experiences and meaningful patient outcomes, the transformation to digital healthcare is accelerating like never before, offering the possibility of more productive, safer, and healthier lives.

According to analysts at Forbes Magazine, healthcare trends for 2019 will continue to address improving the speed of services, the security of patient data, and a growing adoption of AI technology.

And it’s all happening in the cloud.

• **Telemedicine** will continue to grow in popularity and effectiveness. From just over 1 million patients in 2015 to more than 7 million in 2018, more patients are understanding that a phone call and a smartphone snapshot can reduce office visits.

• **AI** and deep learning will speed test results and improve CT scan analysis by up to 150x.

• **Blockchain** technology will enter more fully into the protection of electronic health records, giving peace of mind to patients, and saving hospitals money

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<td>Office visits replaced by telemedicine in 2018</td>
<td>Patient data with the power of blockchain</td>
<td>Faster analysis of CT scans by using AI</td>
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Local hospitals, global vision

Industry innovation that comes from real-world practice

Canterbury District Health Board is responsible for the healthcare of more than half a million people on the east coast of New Zealand’s South Island. Most of that population lives in the greater Christchurch area where Canterbury operates six major hospitals.

The district also owns and operates many smaller urban and rural facilities, and provides additional specialized services to patients referred from other health boards.

Due to its effective model of integrated services, Canterbury’s health system has been recognized as one of the highest performing health systems in the world by The King’s Fund in London, and was featured recently in The Guardian newspaper in an article about world healthcare leaders whose ideas could transform England’s NHS.

500k+ Citizens to care for

10,000+ Employees
(largest employer in the South Island).

Worldwide Recognition for innovation
Preparing for the unexpected
And becoming a force of calm amidst chaos

In the seven years since the earthquake that forced Canterbury DHB to rebuild and rethink its data center, the district has partnered with HPE to ensure its facilities have the capabilities to support digital initiatives that lead to better care. “When you have a shared electronic health record, it means that information is at the fingertips of all the clinicians anywhere in the system,” explains Stella Ward, Chief Digital Officer at Canterbury DHB.

Now, with resilience, reliability, and a big data initiative in place, new challenges still present themselves. In fact, on March 15, 2019, a terrorist attack on two Christchurch mosques left 49 survivors in need of emergency critical care. “It’s very unusual for one hospital to receive all the victims after a tragedy like this,” Ward recalls. “But as a result of our investment in infrastructure, applications, and people processes, we were able to respond well as a unified health system to support those injured who were cared for in the Christchurch hospital.”

Being ready for the next emergency is a constant challenge. But Canterbury DHB has proven it can be the force of calm and competency in the face of chaos.

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Stella Ward, Chief Digital Officer, Canterbury District Health Board
Optimizing for cloud and clinicians

Delivering industry leading solutions in any situation

As its services have evolved and transformed, the reputation of Canterbury DHB has spread across New Zealand and beyond. Today, the Board is a service provider to the entire South Island for critical clinical applications.

Delivering those applications with reliability and resilience regardless of location, and regardless of surrounding circumstances is of tantamount importance to the Board.

“We need to ensure that we’re making the best choices for what needs to be on-prem, what needs to be in our private cloud, and what opportunities we have to leverage cost reductions in the public cloud,” Ward explains.

For Canterbury DHB, the challenge became another opportunity to improve not just IT but processes. “Every IT challenge is also a people challenge,” Ward says. “So the first thing is inspiring people about where we’re going and how they can come with us on this journey.”

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Stella Ward, Chief Digital Officer, Canterbury District Health Board
The right technology enables better care

Ease of use supports clinician-patient interaction

Canterbury turned to HPE Pointnext Services for hybrid cloud strategy expertise. HPE consultants performed an assessment of the Board’s applications against security, governance, economic, and capability standards.

“The idea is that if we put our applications on the right technology, it ultimately means that people will find it easier to use,” Ward says. “And when it’s easy to use, then it doesn’t get in the way of the people-to-people part of our job, which is the important part of care: clinician to patient.”

Together, Canterbury and HPE are planning a long-range cloud journey that will encourage both technical improvement and human opportunity.

It’s a move toward bold innovation for an industry that tends to favor more familiar solutions. “Healthcare systems don’t like taking risks, but with the framework that HPE brings, we can take the risk out, because there’s a robust methodology at the core that’s proven successful many times over,” Ward explains.

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Stella Ward, Chief Digital Officer, Canterbury District Health Board
Transforming care through cloud adoption
Focusing on innovation instead of infrastructure

Twenty weeks into their cloud transformation, IT leaders at Canterbury DHB began to experience a more agile way of delivering care on the South Island and beyond.

“We're already seeing the ability for us to deliver new features and functionality to our clinicians in a much faster way,” Ward relates. “When we hear about a problem, we're able to quickly identify why they need our support and be much more responsive.”

As a result of working with HPE Pointnext Services consultants, the team at Canterbury is less tied to physical IT and more focused on capabilities. “Now instead of thinking about our infrastructure, we’re thinking about features that can drive innovation to the business,” Ward says. “In fact, we don’t see this as an IT program—it's a business transformation program.”

Moving to a hybrid cloud approach also opens up new opportunities for Canterbury as a service provider beyond its walls. “As we’re able to leverage the capability of the public cloud, more district health boards could choose to have us as their service provider—and that could free them up from an infrastructure perspective and allow them to focus on local needs,” Ward explains. “And that creates an opportunity for us to attract more talent and deliver to an increased customer base.”

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